

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA

AMERICAN CHEMISTRY COUNCIL, :  
 :  
Plaintiff, :  
 :  
v. : Civil Action No. 02-2349 (JR)  
 :  
CHRISTINE T. WHITMAN, :  
Administrator, U.S. :  
Environmental Protection Agency, :  
et al., :  
 :  
Defendants. :

MEMORANDUM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 ("EPCRA"), codified at 42 U.S.C. § 11023, requires annual reporting by facilities that use certain specified toxic chemicals. The reports, submitted to the United States Environmental Protection Agency ("EPA") on forms, identify the chemicals and state the quantities released to the air, water and land. Plaintiff American Chemistry Council ("ACC") petitioned for the removal of methyl ethyl ketone ("MEK") from the list of toxic chemicals for which § 313 reports must be filed and here challenges the EPA's denial of that petition. Before the Court are plaintiff's motion for summary judgment [#12] and defendant's cross-motion for summary judgment [#15]. For the reasons stated below, plaintiff's motion will be **denied**, defendant's cross-motion will be **granted**, and the case will be **dismissed**.

## Background

To fulfill its responsibility to inform the public about the release of toxic chemicals into the environment, EPCRA requires facilities that use chemicals on the Toxic Release Inventory ("TRI") list, see 42 U.S.C. § 11023(c), annually to file "toxic chemical release form[s]." Id. § 11023(a). MEK is one of 309 chemicals that were placed on the initial TRI list, not by the EPA, but by Congress, id. 11023(c); 52 Fed. Reg. 3,479 (Feb. 4, 1987). Congress authorized EPA "by rule [to] add or delete a chemical from the [TRI] list . . . at any time," 42 U.S.C. § 11023(d)(1), and laid down guidelines for EPA to use in doing so:

### (2) Additions

A chemical may be added if the Administrator determines, in his judgment, that there is sufficient evidence to establish any one of the following:

(A) The chemical is known to cause or can reasonably be anticipated to cause significant adverse acute human health effects at concentration levels that are reasonably likely to exist beyond facility site boundaries as a result of continuous, or frequently recurring, releases.

(B) The chemical is known to cause or can reasonably be anticipated to cause in humans--

- (i) cancer or teratogenic effects, or
- (ii) serious or irreversible--
  - (I) reproductive dysfunctions,
  - (II) neurological disorders,
  - (III) heritable genetic mutations, or
  - (IV) other chronic health effects.

(C) The chemical is known to cause or can reasonably be anticipated to cause, because of-

(i) its toxicity,

(ii) its toxicity and persistence in the environment, or

(iii) its toxicity and tendency to bioaccumulate in the environment,

a significant adverse effect on the environment of sufficient seriousness, in the judgment of the Administrator, to warrant reporting under this section. The number of chemicals included on the list described in subsection (c) of this section on the basis of the preceding sentence may constitute in the aggregate no more than 25 percent of the total number of chemicals on the list.

A determination under this paragraph shall be based on generally accepted scientific principles or laboratory tests, or appropriately designed and conducted epidemiological or other population studies, available to the Administrator.

### (3) Deletions

A chemical may be deleted if the Administrator determines there is not sufficient evidence to establish any of the criteria described in paragraph (2).

Id. at §§ 11023(d)(2)-(3).

MEK is a clear, colorless, stable, low-boiling, highly volatile and highly flammable liquid used as a solvent in the surface coatings industry (i.e. in vinyl lacquers, nitrocellulose lacquers and acrylics); as a solvent for adhesives, printing inks, degreasing and cleaning fluids, and smokeless powder; and as an intermediate in the production of antioxidants, perfumes,

and catalysts. See Methyl Ethyl Ketone; Toxic Chemical Release Reporting; Community Right-to-know, 63 Fed. Reg. 15,195, 15,196-97 (EPA Mar. 30, 1998) (denial of petition). It is undisputed that MEK is a volatile organic compound ("VOC") and a precursor to the formation of tropospheric ozone, and that tropospheric ozone is known to have significant adverse effects on human health and the environment. EPA denied plaintiff's petition to remove MEK from the TRI list on March 30, 1998, finding, because of its role as a precursor to the formation of tropospheric ozone, that it satisfied both §§ (d) (2) (B) and (d) (2) (C).<sup>1</sup> Plaintiff instituted this action on November 27, 2002.

### **Analysis**

In reviewing EPA's interpretation of the EPCRA, I must first determine whether the language of the statute is clear and unambiguous. See Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 842-43 (1984). If it is, then the language of the statute controls. See id. "[I]f the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute." Id. at 843.

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<sup>1</sup>Because this opinion gives Chevron deference to EPA's determination under § (d) (2) (B) and finds that the denial of ACC's petition was not arbitrary and capricious, it does not address the parties' arguments concerning § (d) (2) (C).

This case moves almost directly to the second Chevron step, because the words "cause or can reasonably be anticipated to cause" are (plainly) ambiguous. 42 U.S.C. § 11023(d)(2)(B). "Causation is one of the most famously complicated concepts in language and in law." United States v. Nelson, 277 F.3d 164, 186 (2d Cir. 2002); see also id. ("The ancient Greeks, for example, distinguished among four concepts all now covered by the modern English word 'cause.' And the modern law of torts employs at least three concepts of cause: 'cause-in-fact' or 'but for' cause, 'proximate' or 'legal' cause, and 'causal link' or 'causal tendency.'" (citing in part Guido Calabresi, Concerning Cause and the Law of Torts: An Essay for Harry Kalven, Jr., 43 U. Chi. L. Rev. 69, 71 (1975) (identifying and differentiating these three modern causal concepts))). The EPCRA provides no guidance as to what degree of causation is necessary to satisfy the causal element of § 11023(d)(2)(B).

At Chevron's step two, the agency's interpretation is entitled to deference<sup>2</sup> and will be given "controlling weight unless [it is] arbitrary, capricious, or manifestly contrary to the statute." Chevron, 467 U.S. at 843-44.

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<sup>2</sup>The parties' dispute about what level of deference should be given to the EPA's interpretation, see Def.'s Mem., at 11, Pl.'s Opp'n, at 2, need not be resolved, because EPA's interpretation is reasonable even if the least deferential standard is applied.

Plaintiff does not dispute EPA's assertion that "[t]he presence of VOCs is a necessary antecedent for the formation of sufficiently significant amounts of ozone in the atmosphere to produce the resultant effects on human health." Def.'s Mem., at 23 (emphasis added). But ACC argues that MEK does not "cause" or cannot be "reasonably . . . anticipated to cause" chronic health effects (§ 313(d)(2)(B)) because exposure to the chemical itself does not cause such adverse effects. A capsule summary of this argument is necessary, but not sufficient.

EPA does not interpret the statutory requirement of causation to "require a single-step path between exposure to the toxic chemical and the effect." 63 Fed. Reg. at 15,199. EPA explains the role of MEK (and other VOCs) as precursor to tropospheric ozone in the following terms:

Tropospheric ozone is formed when ultraviolet radiation dissociates nitrogen dioxide (NO<sub>2</sub>) into nitric oxide and atomic oxygen (O). The atomic oxygen reacts with the ordinary oxygen molecules to form, inter alia, ozone (O<sub>3</sub>). No VOC need be present for this reaction to occur. But, in the absence of VOCs, the ozone thus formed readily reacts with NO<sub>x</sub> to form NO<sub>2</sub> and ordinary oxygen (O<sub>2</sub>). In the presence of VOCs, however, this latter reaction occurs less frequently. Thus, the presence of VOCs such as MEK functions to prevent the conversion of ozone to oxygen and results in the buildup of significant concentrations of ozone in the atmosphere. Its presence is thus a necessary condition to the circumstances that produce [adverse effects on human health and the environment].

Def.'s Reply, at 20-21 (internal citations omitted; emphasis added). The ACC does not deny the role of MEK (and other VOCs)

in the formation of ozone, but emphasizes the uncertainty of tropospheric ozone formation after MEK emission:

Ozone can be formed when volatile organic compounds (including MEK and almost every other organic compound) and nitrogen oxides (NOx) react in the atmosphere. These compounds, when present together in the atmosphere, will not always form ozone, however. As EPA has found, '[t]he formation of O3 [ozone] and other oxidants from these precursors [i.e., NOx and VOCs] is a complex, nonlinear function of many factors, including temperature, the intensity and spectral distribution of sunlight, atmospheric mixing and related meteorological conditions, the concentrations of the precursors in ambient air and the ratio between VOC and NOx, and the reactivity of the organic precursors.' . . . In sum, the formation of tropospheric ozone is neither an inevitable nor a predetermined outcome of MEK emissions, but rather is dependent on numerous variables and intervening causes that do not always exist when MEK is released into the environment.

Pl.'s Mem., at 18-19 (quoting in part an EPA publication (internal citation omitted)).

Congress required the EPA to make listing decisions by relying on "generally accepted scientific principles . . . ." 42 U.S.C. § 11023(d)(2). EPA's understanding of the causation element of § (d)(2)(B) to require either a toxic effect "caused directly by a chemical by a one-step process, or indirectly by a degradation product of the chemical or by a second chemical that is created through chemical reactions involving the first chemical,"<sup>3</sup> 63 Fed. Reg. at 15,199, appears to fall within

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<sup>3</sup>EPA further explained:

It is a generally accepted scientific

generally accepted principles.<sup>4</sup> Certainly § (d)(2)(B)'s language does not unambiguously exclude the EPA's interpretation, or render it unreasonable.

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principle that causality need not be linear, i.e., a one-step process. For purposes of EPCRA section 313, the distinction between direct and indirect effects is technically an artificial one. Whether the toxic effect is caused directly by a chemical by a one-step process, or indirectly by a degradation product of the chemical or by a second chemical that is created through chemical reactions involving the first chemical, the toxic effect still occurs as a result of the presence of the chemical in the environment. . . . Fundamentally, EPCRA section 313 is concerned with adverse effects on humans and the environment, not the chain of causation by which such effects occur.

63 Fed. Reg. at 15,199 (internal citation omitted).

<sup>4</sup>Contrary to plaintiff's assertions, this case is distinguishable from Fertilizer Institute v. Browner, 48 E.R.C. 2008 (D.D.C. 1999). The process by which the chemical at issue in that case, phosphoric acid, could cause significant adverse effects is more attenuated than with MEK. Moreover, the decision in Fertilizer Institute is careful to distinguish phosphoric acid from VOCs:

In contrast [to phosphoric acid], . . . volatile organic compounds (VOCs), which EPA had previously declined to delist, have toxic effects that, though indirect, are inevitable and not dependent on any variables or intervening causes. The chemical reactions these chemicals undergo in the atmosphere contribute to the depletion of the ozone layer and the creation of air pollutants, which in turn have negative impacts on human health and the ozone layer. For . . . VOCs, the toxic effect is caused by chemicals that are by-products of the original chemical; the same can hardly be said of phosphoric acid.

48 E.R.C. at \*5.



When searching for the meaning of an ambiguous statutory provision, a court should focus on the broader structure and purpose of the statute. See Pharm. Research & Mfrs. of Am. v. Thompson, 251 F.3d 219, 224 (D.C. Cir. 2001); Nat'l Rifle Ass'n of Am., Inc. v. Reno, 216 F.3d 122, 127 (D.C. Cir. 2000). The toxic chemical release forms required under EPCRA are "intended to provide information to the Federal, State, and local governments and the public, . . . to inform persons about releases of toxic chemicals to the environment; to assist governmental agencies, researchers, and other persons in the conduct of research and data gathering; to aid in the development of appropriate regulations, guidelines, and standards; and for other similar purposes." 42 U.S.C. § 11023(h). EPA has expressly found that interpreting § (d)(2)(B) as it does is consistent with EPCRA's "purpose of [providing the] public [with] access to information about chemicals that cause a wide range of adverse health . . . effects." 63 Fed. Reg. at 15,200.

ACC's Chicken Little assertion that EPA's broad interpretation of § (d)(2)(B) will result in all VOCs being listed on EPCRA is refuted by EPA's explanation that "it is not EPA's intention to include all VOC chemicals on the EPCRA section 313 list, [but] those VOCs whose volume of use or emissions are large enough to raise substantial VOC concerns would be retained on the EPCRA section 313 list[:]. MEK is a VOC with both a high

production volume and high air emissions." Id. at 15,199.

Indeed, the EPA has not sought to add VOCs to the § 313 list to date, nor did EPA place MEK on the list: Congress did.<sup>5</sup>

ACC goes on to argue that EPA's refusal to remove MEK from the § 313 list makes the term "toxic" superfluous, since it is undisputed that MEK does not cause serious or irreversible health effects when ingested, inhaled or otherwise absorbed into the body. EPA correctly responds, however, that toxicity is the subject of § (d)(2)(C), not § (d)(2)(B), which deals with cancer or teratogenic effects and with serious or irreversible reproductive disfunction, neurological disorder, heritable genetic mutation, or "other chronic health effects." And, of course, Congress must have known what it meant when it included MEK on its list in the first place.

ACC's final argument is that the EPA's decision not to delist MEK is arbitrary and capricious because it has never sought to list a VOC. If this argument requires any response at all, see, e.g., Hazardous Waste Treatment Council v. EPA, 861

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<sup>5</sup>ACC also asserts that such an interpretation is unnecessary because VOCs are already regulated by the Clean Air Act, which is intended to be an ozone control program. The EPA has previously explained that it considers § 313 of the EPCRA and the risk assessment provisions of the Clean Air Act to be different. See Addition of Certain Chemicals; Toxic Chemical Release Reporting; Community Right-to-Know, 59 Fed. Reg. 61,432, 61,441 (EPA Nov. 30, 1994) ("EPCRA section 313 is an information collection provision that is fundamentally different from other environmental statutes that control or restrict chemical activities.").

F.2d 277, 287 (D.C. Cir. 1988) ("[A]n agency's failure to regulate more comprehensively is not ordinarily a basis for concluding that the regulations already promulgated are invalid."), EPA has successfully refuted it: EPA has not delisted any VOCs. See Cyclohexane; Toxic Chemical Release Reporting; Community Right-to-Know, 54 Fed. Reg. 10,668, 10,668 (EPA Mar. 15, 1989) (denying a petition to delist cyclohexane from the list of toxic chemicals under section 313 of EPCRA "based on EPA's conclusion that cyclohexane is a high volume volatile organic compound that contributes to the formation of tropospheric ozone and other hazardous air pollutants such as formaldehyde"); Ethylene and Propylene; Toxic Chemical Release Reporting; Community Right-to-Know, 54 Fed. Reg. 4,072, 4,072 (denying a petition to delist ethylene and propylene from the list of toxic chemicals under section 313 of EPCRA "based on the EPA's conclusion that both ethylene and propylene are high volume volatile organic compounds that contribute to the formation of tropospheric ozone and other hazardous air pollutants such as formaldehyde"). But EPA has added two chemicals to the list, using the same reasoning it has applied here. See Ozone Depleting Chemicals; Toxic Chemical Release Reporting; Community Right-To-Know; Addition of Chemicals, 55 Fed. Reg. 31,594, 31,595 (granting two petitions to add chemicals to the TRI, relying on the chemicals' indirect effects on human health effects and

explaining in part that "EPA believes that indirect effects can and should be considered in determining whether or not a chemical should be subject to reporting under section 313"). EPA has acted consistently, and not arbitrarily or capriciously.

I find the EPA's determination that MEK satisfies the § (d) (2) (B) listing criteria to be reasonable, based on a permissible construction of the statute, and neither arbitrary nor capricious.

JAMES ROBERTSON  
United States District Judge

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**ORDER**

For the reasons stated in the accompanying memorandum,  
it is

**ORDERED** that plaintiff's motion for summary judgment  
[[#12](#)] is **denied**,

**ORDERED** that defendant's cross-motion for summary  
judgment [[#15/18](#)] is **granted**, and

**ORDERED** that the case is **dismissed**.

JAMES ROBERTSON  
United States District Judge